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Technological Advances Mean More Domestic Oil and Gas for America

A sea-change is underway in the business of producing offshore mineral resources, as energy companies venture further from shore and explore in ever-deeper waters for the oil and natural gas needed to fuel the Nation's economy and maintain our quality of life.

Ever since the passage of the Outer Continental Shelf Lands Act 50 years ago, there has been tremendous growth in technological innovation, a trend that has ramped up in the last decade. Because of the technological revolution occurring in offshore, industry has gained the capability to drill in the deepest waters of the ocean. Since 2002, the energy industry has announced seven new major discoveries in ultra-deep water areas (7,500 feet or greater) in the Gulf of Mexico. But this presents myriad challenges for the Minerals Management Service (MMS), the Federal authority designated by the Department of the Interior to manage mineral resource development on the 1.76 billion acres of offshore Federal lands.

The MMS's fiscal year 2006 budget request includes items that will allow the bureau to keep pace. It includes the following three critical initiatives to meet the operational, evaluation and safety needs linked to this trend.

MONTCAR

A resource evaluation computer software model, MONTCAR is used by MMS's energy analysts to develop fair market value estimates on production bids and in preparing deep water and deep gas royalty relief initiatives. Through use of MONTCAR, MMS has seen a significant increase in higher returns – specifically, an increase of more than 50 percent in bidding interest and 150 percent in bonus paid.

However, the proprietary nature of the model and the need for rapid and frequent changes to incorporate new laws and regulations is proving complex and expensive. This situation is made more precarious with only a few retirement-eligible staff capable of operating it. It has evolved to the point where it would be less costly to develop a new model rather than continuing to modify or attempting to convert the current one.

With $500,000 in funding for a new evaluation model, MMS can improve resource evaluation technology and ensure the fair market value mandated by law, which is an important part of MMS' mission.

Deepwater Helicopter Safety Initiative

Inspectors representing MMS visit offshore oil and gas facilities in order to conduct mandatory inspections and ensure compliance with MMS regulations. Additionally, MMS performs inspections on behalf of the U.S. Coast Guard and the Environmental Protection Agency, and coordinates with the Nuclear Regulatory Commission to transport their inspectors so they may review the licensees under their jurisdiction.

Furthermore, MMS anticipates that the industry will continue to move exploration and development activities further out to sea. The new major discoveries in the ultra-deep water areas have been followed by the filing of additional plans for exploration in the ultra-deep water areas and will soon require that appraisal, delineation and

development wells be drilled near the discovery, all of which require MMS inspections. Longer-range helicopters will be needed to travel these long distances in order to improve the safety of passengers and the efficiency of inspections.

In addition, the industry is employing a greater number of drilling rigs in these water depths. In response to this trend, MMS is considering aviation-contracting options for its deep water inspection strategy, but new aviation-contracting and high fuel prices have increased the cost of deep water helicopter transportation. Transportation of inspection personnel to deepwater facilities involves increased flight times and other logistical and safety issues. The $1.6 million for the Deepwater Helicopter Safety initiative is designed to ensure that MMS can safely meet the growing regulatory inspection requirements necessary in the case of deepwater activity.

Interpretive Technologies Support Initiative

As OCS exploration and development moves further offshore, more advanced and sophisticated technology is needed to ensure that the Treasury and the public receive fair market value for the energy resources managed by MMS, as well as to ensure that resource conservation decisions are based on solid scientific data.

The Interpretive Technologies Support initiative will fund acquisition of additional geophysical data necessary for proper evaluation of resources in ultra deep water areas; an additional data management contractor to more effectively manage large volumes of interpretive data; technical training; and a cooperative development program for geologists and engineers to ensure recruitment of high quality personnel.

Moreover, MMS manages the 1.76 billion acres of the OCS, the source of 30 percent of the oil and 23 percent of the natural gas that is produced in the U.S. The quality of technology and data directly impact MMS' ability to evaluate and obtain fair market value for the American taxpayer. The $500,000 for this initiative will come back to the public through royalties on oil and gas development in the deep water frontiers.